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Ensuring ethical and legal compliance of cutting-edge DNA sequencing technologies. Practical considerations from H2020 project EASI-Genomics

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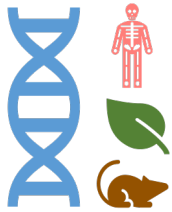
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EASI Genomics in one sentence



The European Advanced infraStructure for Innovative Genomics (EASI-Genomics) is unifying the major European genomic centers providing **free external access** to cutting-edge DNA sequencing technologies (human, animal, vegetal) to researchers from both academia and industry, **within or outside of Europe**.



Values shared by EASI Genomics partners

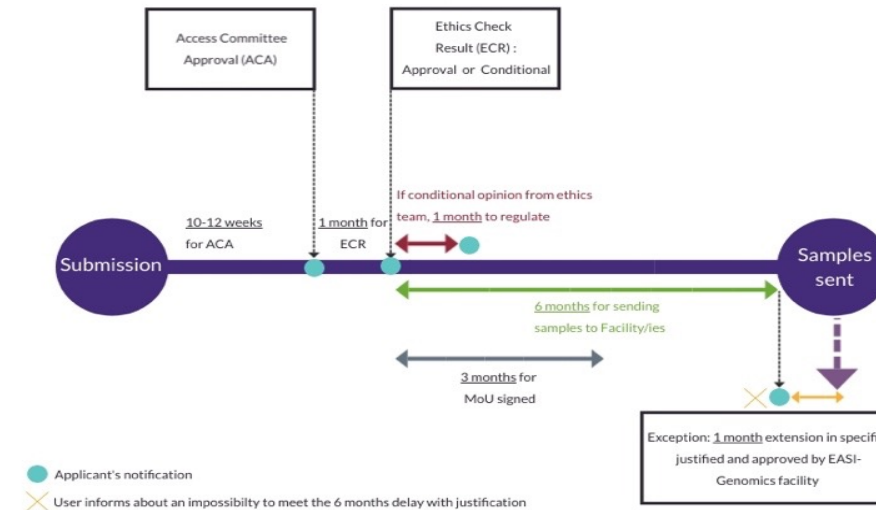


Explaining in general terms the characteristics, objectives and ethics-by-design approach of EASI Genomics, the **Memorandum of Understanding (MoU)** has to be signed by EASI Genomics members, sequencing facilities as well as users who have successfully applied and obtained transnational access. In this regard, the MoU is an important, constitutional and structuring act for EASI-Genomics.

How does EASI Genomics ensure ethical and legal compliance?

Interdisciplinary **ethics check** by two reviewers on projects that have been successfully evaluated by the Transnational Access Committee. The goal is to verify and document ethical and legal compliance of research projects by collecting administrative authorisations. EASI Genomics is especially vigilant on :

- Compliance with ethics rules for **research with humans**
- Compliance with ethics rules for **research with animals**
- Compliance with **personal data protection** rules
- Compliance with the **Nagoya Protocol**
- Publication of resulting knowledge in **open access**
- Respect of the **FAIR principles**



What have been the most challenging topics so far?

Applicability of Access and Benefit Sharing (ABS) Regulation to ancient DNA?

While different views were expressed among the experts, it appeared that this question was a grey area of law on which only little literature is available.



Safeguards for CRISPR CAS9 engineered biomaterials?

There does not seem to be a real international or European consensus about the rules on cross-border exchange of such biomaterials regarding any biosafety and biosecurity requirements.

Apply now!

EASI Genomics has recently launched an **extraordinary call for Covid-19 related projects which is opened until 30 June 2020** and will benefit from an accelerated selection process. This call will focus on whole-genome (short- and/or long-read), whole exome and RNA sequencing of human patients from low-risk populations with severe forms of SARS-Cov-2 infection that have experienced adverse reactions or fatal outcomes

For more information: <https://www.easi-genomics.eu/access/calls/covid-19-call>

